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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/981,516	10/17/2001	Steven A. Shaya	JJCC-0003	7651

7590 05/19/2005

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EXAMINER	
THEIN, MARIA TERESA T	
ART UNIT	**PAPER NUMBER**
3627	

DATE MAILED: 05/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/981,516	SHAYA ET AL.	
	Examiner	Art Unit	
	Marissa Thein	3627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 January 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-29* is/are pending in the application.

4a) Of the above claim(s) *30-83 and 89-102* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-29* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *17 October 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *1-29-02*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

Claim 30-83 and 89-102 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **with** traverse in the reply filed on January 28, 2005.

Applicants' election without traverse of Group 1, claims 1-29 in the reply filed on January 28, 2005 is acknowledged.

Applicants are respectfully requested to cancel the non-elected claim in response to the Office Action.

Information Disclosure Statement

The information disclosure statement (IDS) submitted on January 29, 2002 is being considered by the examiner.

Specification

The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Drawings

The drawings filed on October 17, 2001 are acceptable.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

As an initial matter, the United States Constitution under Art. I, §8, cl. 8 gave Congress the power to "[p]romote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries". In carrying out this power, Congress authorized under 35 U.S.C. §101 a grant of a patent to "[w]hoever invents or discovers any new and useful process, machine, manufacture, or composition or matter, or any new and useful improvement thereof." Therefore, a fundamental premise is that a patent is a statutorily created vehicle for Congress to confer an exclusive right to the inventors for "inventions" that promote the progress of "science and the useful arts". The phrase "technological arts" has been created and used by the courts to offer another view of the term "useful arts". See In re Musgrave, 167 USPQ (BNA) 280 (CCPA 1970). Hence, the first test of whether an invention is eligible for a patent is to determine if the invention is within the "technological arts".

Further, despite the express language of §101, several judicially created exceptions have been established to exclude certain subject matter as being patentable subject matter covered by §101. These exceptions include "laws of nature", "natural phenomena", and "abstract ideas". See Diamond v. Diehr, 450, U.S. 175, 185, 209 USPQ (BNA) 1, 7 (1981). However, courts have found that even if an invention incorporates abstract ideas, such as mathematical algorithms, the invention may nevertheless be statutory subject matter if the invention as a whole produces a "useful,

concrete and tangible result." See State Street Bank & Trust Co. v. Signature Financial Group, Inc. 149 F.3d 1368, 1973, 47 USPQ2d (BNA) 1596 (Fed. Cir. 1998).

This "two prong" test was evident when the Court of Customs and Patent Appeals (CCPA) decided an appeal from the Board of Patent Appeals and Interferences (BPAI). See In re Toma, 197 USPQ (BNA) 852 (CCPA 1978). In Toma, the court held that the recited mathematical algorithm did not render the claim as a whole non-statutory using the Freeman-Walter-Abele test as applied to Gottschalk v. Benson, 409 U.S. 63, 175 USPQ (BNA) 673 (1972). Additionally, the court decided separately on the issue of the "technological arts". The court developed a "technological arts" analysis:

The "technological" or "useful" arts inquiry must focus on whether the claimed subject matter...is statutory, not on whether the product of the claimed subject matter...is statutory, not on whether the prior art which the claimed subject matter purports to replace...is statutory, and not on whether the claimed subject matter is presently perceived to be an improvement over the prior art, e.g., whether it "enhances" the operation of a machine. In re Toma at 857.

In Toma, the claimed invention was a computer program for translating a source human language (e.g., Russian) into a target human language (e.g., English). The court found that the claimed computer implemented process was within the "technological art" because the claimed invention was an operation being performed by a computer within a computer.

The decision in State Street Bank & Trust Co. v. Signature Financial Group, Inc. never addressed this prong of the test. In State Street Bank & Trust Co., the court

found that the "mathematical exception" using the Freeman-Walter-Abele test has little, if any, application to determining the presence of statutory subject matter but rather, statutory subject matter should be based on whether the operation produces a "useful, concrete and tangible result". See State Street Bank & Trust Co. at 1374. Furthermore, the court found that there was no "business method exception" since the court decisions that purported to create such exceptions were based on novelty or lack of enablement issues and not on statutory grounds. Therefore, the court held that "[w]hether the patent's claims are too broad to be patentable is not to be judged under °101, but rather under §§102, 103 and 112." See State Street Bank & Trust Co. at 1377. Both of these analysis goes towards whether the claimed invention is non-statutory because of the presence of an abstract idea. Indeed, State Street abolished the Freeman-Walter-Abele test used in Toma. However, State Street never addressed the second part of the analysis, i.e., the "technological arts" test established in Toma because the invention in State Street (i.e., a computerized system for determining the year-end income, expense, and capital gain or loss for the portfolio) was already determined to be within the technological arts under the Toma test. This dichotomy has been recently acknowledged by the Board of Patent Appeals and Interferences (BPAI) in affirming a §101 rejection finding the claimed invention to be non-statutory. See Ex parte Bowman, 61 USPQ2d (BNA) 1669 (BdPatApp&Int 2001).

In the present application, claims 1-29 have no connection to the technological arts. The preamble of the claims and the steps of the method have no connection to a computer or technology. For example in claim 1, the steps of receiving a first set of

data and generating a set of individualized product recommendation are broadly interpreted as manual steps. Therefore, the claims are directed towards non-statutory subject matter, i.e. not within technological arts. To overcome this rejection, the Examiner recommends that Applicant amend the preamble of the claim and the steps to better clarify which steps are being performed within the technological arts, such as using a digital computing device.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-8, 18-22, and 28-29 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,782,307 to Wilmott et al.

Regarding claim 1, Wilmott discloses a method for formulating individualized product recommendation comprising: receiving a first set of data from a consumer regarding a target substrate (col. 3, lines 34-42; col. 3, line 66- col. 4, line 12; Figure 2); and generating a set of individualized product recommendation for the consumer from a plurality of products within a product category, the generating comprising feeding the first set of data as inputs into an intelligent performance-based product recommendation engine, operating on the inputs with a data processing portion of the product

recommendation engines, and producing a set of outputs from the data processing portion of the product recommendation engine, the outputs comprising the set of individualized product recommendation (col. 3, lines 56-65; col. 2, lines 52-65; col. 7, lines 20-50; Figure 2).

Regarding claims 2-8, Wilmott discloses receiving a concern about the substrate; severity of the concern; and importance of the concern (Figure X2; Figures X3-A - X3-C; col. 6, lines 22-31); receiving a second set of data from the consumer, the second set of data comprising historical data and wherein the first and second set of data comprise the inputs into the product recommendation engine (Figure X3-A; col. 3, lines 58-62); a third set of data from the consumer comprising personal profile information about the consumer (col. 3, lines 35-42).

Regarding claims 18-21, Wilmott discloses generating ancillary information output from the product recommendation engine inputs regarding effects of at least of the products and the condition of the target substrate relative to a designated population of consumers (col. 5, lines 23-43).

Regarding claims 22 and 28-29, Wilmott disclose a web page (col. 2, lines 56-58); and receiving a first set of data about the consumer's skin and the generation a set of individualized product recommendation for the consumer step comprises generating a set of individualized product recommendation from a plurality of skin-care products (Figures X3A - X3C; Figure X2); and payment (col. 9, line 46; col. 9, line 60).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 9-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,782,307 to Wilmott et al. Wilmott substantially discloses the claimed invention, however, it does not disclose the particular data processing portion (a neural network portion, a collaborative filter portion, a content-based portion, and cascaded content-based filter). Although the reference is silent to the particular portion, it would have been obvious to one of ordinary skill in the art to have provided the portion already disclosed by Wilmott to have been a neural network portion, a collaborative filter portion, a content-based portion, and cascaded content-based filter, such portions would have been recognized by the skilled artisan as being one of numerous portions suitable in the operation. Moreover, applicant has not persuasively demonstrated that the particular data processing portion is critical or is anything more than one of the numerous data processing portions that the skilled artisan would have found suitable for the purpose taught by Wilmott.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use a neural network portion, a collaborative filter portion, a content-based portion, and cascaded content-based filter inputs to provide the operation, such as the data processing portion taught in Wilmott, for the purpose of providing a recommendation.

Claims 13-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No 6,782,307 to Wilmott et al in view of U.s. Patent No. 6,321,221 to Bieganski.

Regarding claims 13-17, Wilmott substantially disclose the claimed invention, however, it does not disclose producing a first of products and a scored predicted and performance utility; producing a first list of top-N products and a scored predicted and performance; and a first list of products and a purchase price. Wilmott does disclose a method where the user is asked to select the general type of product they are interested in (col. 3, lines 56-57). The indication is modified in accordance with the user profile, and perhaps history of prior orders to emphasize products which may be of particular interest and remove the times which hare unlikely to interest the customer or feature them less prominently (col. 3, lines 61-63).

Bieganski, on the other hand, teaches producing a first of products and a scored predicted and performance utility; producing a first list of top-N products and a scored predicted and performance; and a first list of products and a purchase price (col. 3, lines 26-56; col. 5, lines 32-43; col. 9, lines 10-18).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the method of Wilmott, to include the first list, score and price, as taught by Bieganski, in order to generate the highest-ranking preference values (Bieganski, col. 2, lines 64-65).

Regarding claims 23-27, Wilmott substantially discloses the claimed invention, however, it does not disclose the receiving feedback from the consumer regarding use

of a product to treat the target substrate; feedback from the consumer regarding use of previously recommended product; receiving preference data regarding the product; performance data; and retraining the product recommending engine based on the feedback. Wilmott does disclose a method where the user is asked to select the general type of product they are interested in (col. 3, lines 56-57). The indication is modified in accordance with the user profile, and perhaps history of prior orders to emphasize products which may be of particular interest and remove the times which hare unlikely to interest the customer or feature them less prominently (col. 3, lines 61-63).

Bieganski, on the other hand, teaches the receiving feedback as recited in the claims (col. 11, lines 48- col. 12, line 10). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the method of Wilmott, to include the receiving feedback, as taught by Bieganski, in order to recommend items with high confidence level (Bieganski, col. 3, lines 18-19).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent No. 5,875,110 to Jacobs discloses a system and method where a customer is guided through an interactive process that receives selection criteria form the customer relating to the type of product the customer would like to purchase.

U.S. Patent No. 6,787,370 to Stack discloses a method and system used for recommending goods and/or services to potential customers based on previous customer's purchasing history.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marissa Thein whose telephone number is 571-272-6764. The examiner can normally be reached on M-F 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Olszewski can be reached on 571-272-6788. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

mtot
May 16, 2005

Michael Cuff 5/16/05

MICHAEL CUFF
PRIMARY EXAMINER